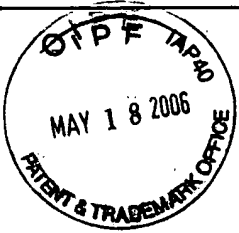


IFW

# ARNOLD & PORTER LLP

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555 Twelfth Street, NW  
Washington, DC 20004-1206



May 18, 2006

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Re: U.S. Application No. 10/569,076  
Filed: February 21, 2006  
Title: Fusion Polypeptides and Use Thereof In Antivascular  
Tumor-Therapy  
Applicants: Wolfgang E. BERDEL *et al.*  
Atty. Docket: 20490.003/P30712US00

Sir:

The following documents are forwarded herewith for appropriate action by the U.S.  
Patent and Trademark Office (PTO):

1. an Information Disclosure Statement;
2. a Form PTO-1449 (listing and supplying 45 references); and
3. a return postcard.

Please stamp the attached postcard with the filing date of these documents and return it to our courier.

Applicants do not believe any fees are due in conjunction with this filing. However, if any fees are required in the present application, including any fees for extensions of time, then the Commissioner is hereby authorized to charge such fees to Arnold & Porter LLP Deposit Account No. 50-2387 referencing matter number 20490.003. A duplicate copy of this letter is enclosed.

Respectfully submitted,

A handwritten signature in cursive script that reads "Kristan Lansbery".

David R. Marsh (Reg. No. 41,408)  
Kristan L. Lansbery (Reg. No. 53,183)

Enclosures



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Wolfgang E. BERDEL *et al.*

Appl. No.: 10/569,076

Filed: February 21, 2006

For: Fusion Polypeptides and Use Thereof  
in Antivascular Tumor-Therapy

Art Unit: To Be Assigned

Examiner: To Be Assigned

Confirmation No. To Be Assigned

Atty Docket. 20490.003/P30712US00

**Information Disclosure Statement**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The attention of the Examiner is invited to consider the references listed on the attached Form PTO-1449. Copies of the references are submitted herewith.

It is respectfully requested that the information above be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

**Certification and/or Fee**

Because this Information Disclosure Statement is being submitted prior to issuance of the first action on the merits of the above-captioned application, no certification or fee is required.

Respectfully submitted,

David R. Marsh (Reg. No. 41,408)  
Kristan L. Lansbery (Reg. No. 53,183)

Date: May 18, 2006

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FORM PTO-1449  
INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

20490.003

APPLICATION NO.

10/569,076

APPLICANTS

Wolfgang E. BERDEL *et al.*

FILING DATE

February 21, 2006

GROUP

To Be Assigned

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA1						
	AB1						

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AC1	WO 03/035688 A	05/2003	WIPO			Yes No
	AD1						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AE1	Arap <i>et al.</i> , "Cancer Treatment by Targeted Drug Delivery to Tumor Vasculature in a Mouse Model", <i>Science</i> 279:377-380 (1998)					
	AF1	Banner <i>et al.</i> , "The Crystal Structure of the Complex of Blood Coagulation Factor VIIa with Soluble Tissue Factor", <i>Nature</i> 380:41-46 (1996)					
	AG1	Bhagwa <i>et al.</i> , "CD13/APN is Activated by Angiogenic Signals and is Essential for Capillary Tube Formation", <i>Blood</i> 97(3):652-659 (2001)					
	AH1	Brooks <i>et al.</i> , "Requirement of Vascular Integrin $\alpha_v\beta_3$ for Angiogenesis", <i>Science</i> 264:569-571 (1994)					
	AI1	Brooks <i>et al.</i> , "Integrin $\alpha_v\beta_3$ Antagonists Promote Tumor Regression by Inducing Apoptosis of Angiogenic Blood Vessels", <i>Cell</i> 79:1157-1164 (1994)					
	AJ1	Brooks <i>et al.</i> , "Localization of Matrix Metalloproteinase MMP-2 to the Surface of Invasive Cells by Interaction with Integrin $\alpha_v\beta_3$ ", <i>Cell</i> 85:683-693 (1996)					
	AK1	Brooks <i>et al.</i> , "Disruption of Angiogenesis by PEX, a Noncatalytic Metalloproteinase Fragment with Integrin Binding Activity", <i>Cell</i> , 92:391-400 (1998)					
	AL1	Burg <i>et al.</i> , "NG2 Proteoglycan-Binding Peptides Target Tumor Neovasculature", <i>Cancer Research</i> 59:2869-2874 (1999)					
	AM1	Burrows <i>et al.</i> , "Up-Regulation of Endoglin on Vascular Endothelial Cells in Human Solid Tumors: Implications for Diagnosis and Therapy", <i>Clinical Cancer Research</i> 1:1623-1634 (1995)					

EXAMINER

DATE CONSIDERED

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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		Wolfgang E. BERDEL <i>et al.</i>	
		FILING DATE	GROUP
		February 21, 2006	To Be Assigned
	AN1	Carnemolla <i>et al.</i> , "A Tumor-associated Fibronectin Isoform Generated by Alternative Splicing of Messenger RNA Precursors", <i>The Journal of Cell Biology</i> 108:1139-1148 (1989)	
	AO1	Curnis <i>et al.</i> , "Enhancement of Tumor Necrosis Factor $\alpha$ Antitumor Immunotherapeutic Properties by Targeted Delivery to Aminopeptidase N (CD13)", <i>Nature Biotechnology</i> 18:1185-1190 (2000)	
	AP1	Curnis <i>et al.</i> , "Differential Binding of Drugs Containing the NGR Motif to CD13 Isoforms in Tumor Vessels, Epithelia, and Myeloid Cells", <i>Cancer Research</i> 62:867-874 (2002)	
	AQ1	Dvorak <i>et al.</i> , "Distribution of Vascular Permeability Factor (Vascular Endothelial Growth Factor) in Tumors: Concentration in Tumor Blood Vessels", <i>J. Exp Med.</i> 174:1275-1278 (1991)	
	AR1	Dvorak <i>et al.</i> , "Vascular Permeability Factor/Vascular Endothelial Growth Factor, Microvascular Hyperpermeability, and Angiogenesis", <i>American Journal of Pathology</i> , 146(5):1029-1039 (1995)	
	AS1	Ellerby <i>et al.</i> , "Anti-Cancer Activity of Targeted Pro-Apoptotic Peptides", <i>Nature Medicine</i> , 5(9):1032-1038 (1999)	
	AT1	Folkman <i>et al.</i> , "Induction of Angiogenesis During the Transition from Hyperplasia to Neoplasia", <i>Nature</i> 339:58-61 (1989)	
	AU1	Gottstein <i>et al.</i> , "Generation and Characterization of Recombinant Vascular Targeting Agents from Hybridoma Cell Lines", <i>BioTechniques</i> 30(1):190-199 (2001)	
	AV1	Healy <i>et al.</i> , "Peptide Ligands for Integrin $\alpha_v\beta_3$ Selected from Random Phage Display Libraries", <i>Biochemistry</i> 34:3948-3955 (1995)	
	AW1	Hu <i>et al.</i> , "Comparison of Three Different Targeted Tissue Factor Fusion Proteins for Inducing Tumor Vessel Thrombosis", <i>Cancer Research</i> 63:5046-5053 (2003)	
	AX1	Huang <i>et al.</i> , "Tumor Infarction in Mice by Antibody-directed Targeting of Tissue Factor to Tumor Vasculature", <i>Science</i> 275:547-550 (1997)	
	AY1	International Search Report of PCT/EP2004/009364 mailed February 23, 2005.	
	AZ1	Koivunen <i>et al.</i> , "Selection of Peptides Binding to the $\alpha_v\beta_1$ Integrin from Phage Display Library", <i>The Journal of Biological Chemistry</i> , 268(27):20205-20210 (1993)	

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		February 21, 2006	To Be Assigned
	AA2	Koivunen <i>et al.</i> , "Tumor Targeting with a Selective Gelatinase Inhibitor", <i>Nature Biotechnology</i> 17:768-774 (1999)	
	AB2	Liu <i>et al.</i> , "Prostate-specific Membrane Antigen Directed Selective Thrombotic Infarction of Tumors", <i>Cancer Research</i> 62:5470-5475 (2002)	
	AC2	Maisonpierre <i>et al.</i> , "Angiopoietin-2, a Natural Antagonist for Tie2 That Disrupts In Vivo Angiogenesis", <i>Science</i> 277:55-60 (1997)	
	AD2	Morrissey <i>et al.</i> , "Quantitation of Activated Factor VII Levels in Plasma Using a Tissue Factor Mutant Selectively Deficient in Promoting Factor VII Activation", <i>Blood</i> 81(3):734-744 (1993)	
	AE2	Nilsson <i>et al.</i> , "Targeted Delivery of Tissue Factor to the ED-B Domain of Fibronectin, a Marker of Angiogenesis, Mediates the Infarction of Solid Tumors in Mice", <i>Cancer Research</i> 61:711-716 (2001)	
	AF2	Olsen <i>et al.</i> , "Targeting the Tumor Vasculature: Inhibition of Tumor Growth by a Vascular Endothelial Growth Factor-Toxin Conjugate", <i>Int. J. Cancer</i> 73:865-870 (1997)	
	AG2	Pasqualini <i>et al.</i> , "Aminopeptidase N Is a Receptor for Tumor-homing Peptides and a Target for Inhibiting Angiogenesis", <i>Cancer Research</i> 60:722-727 (2000)	
	AH2	Peters <i>et al.</i> , "Expression of Tie2/Tek in Breast Tumour Vasculature Provides a New Marker for Evaluation of Tumour Angiogenesis", <i>British Journal of Cancer</i> 77(1):51-56 (1998)	
	AI2	Ran <i>et al.</i> , "Infarction of Solid Hodgkin's Tumors in Mice by Antibody-directed Targeting of Tissue Factor to Tumor Vasculature", <i>Cancer Research</i> 58:4646-4653 (1998)	
	AJ2	Rettig <i>et al.</i> , "Identification of Endosialin, a Cell Surface Glycoprotein of Vascular Endothelial Cells in Human Cancer", <i>Proc. Natl. Acad. Sci. USA</i> 89:10832-10836 (1992)	
	AK2	Rippmann <i>et al.</i> , "Fusion of the Tissue Factor Extracellular Domain to a Tumour Stromaspecific Single-Chain Fragment Variable Antibody Results in an Antigen-Specific Coagulation-Promoting Molecule", <i>Biochemical Journal</i> 349(3):805-812 (2000)	
	AL2	Ruf <i>et al.</i> , "Phospholipid-independent and -dependent Interactions Required for Tissue Factor Receptor and Cofactor Function", <i>The Journal of Biological Chemistry</i> , 266(4):2158-2166 (1991)	
	AM2	Ruoslahti, "Targeting Tumor Vasculature with Homing Peptides from Phage Display", <i>Seminars in Cancer Biology</i> 10:435-442 (2000)	

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	AN2	Scholz <i>et al.</i> , "Correlation of Drug Response in Patients and in the Clonogenic Assay with Solid Human Tumour Xenografts", <i>Eur J. Cancer</i> 26(8):901-905 (1990)	
	AO2	Schnürch <i>et al.</i> , "Expression of tie-2, a Member of a Novel Family of Receptor Tyrosine Kinases, In the Endothelial Cell Lineage", <i>Development</i> 119:957-968 (1993)	
	AP2	Schrappe <i>et al.</i> , "Correlation of Chondroitin Sulfate Proteoglycan Expression on Proliferating Brain Capillary Endothelial Cells with the Malignant Phenotype of Astroglial Cells", <i>Cancer Research</i> 51:4986-4993 (1991)	
	AQ2	Senger <i>et al.</i> , "Angiogenesis Promoted by Vascular Endothelial Growth Factor: Regulation Through $\alpha_1\beta_1$ and $\alpha_2\beta_1$ Integrins", <i>Proc. Natl. Acad. Sci. USA</i> 94:13612-13617 (1997)	
	AR2	Suri <i>et al.</i> , "Requisite Role of Angiopoietin-1, a Ligand for the TIE2 Receptor, During Embryonic Angiogenesis", <i>Cell</i> 87:1171-1180 (1996)	
	AS2	Terman <i>et al.</i> , "Biological Properties of VEGF/VPF Receptors", <i>Cancer and Metastasis Reviews</i> 15:159-163 (1996)	
	AT2	Topp <i>et al.</i> , "Recombinant Human Interleukin-4 Inhibits Growth of Soe Human Lung Tumor Cell Lines In Vitro and In Vivo", <i>Blood</i> 82(9):2837-2844 (1993)	
	AU2	Topp <i>et al.</i> , "Recombinant Human Interleukin 4 Has Antiproliferative Activity on Human Tumor Cell Lines Derived from Epithelial and Nonepithelial Histologies", <i>Cancer Research</i> 55:2173-2176 (1995)	
	AV2	Yun <i>et al.</i> , "Involvement of Integrin $\alpha_v\beta_3$ in Cell Adhesion, Motility, and Liver Metastasis of Murine RAW117 Large Cell Lymphoma", <i>Cancer Research</i> 56:3103-3111 (1996)	
	AW2		

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